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REMARKS

In response to the Office Action mailed on June 18, 2004, Applicants respectfully request reconsideration. To further the prosecution of this Application, Applicants submit the following amendments as well as remarks discussing patentability of rejected and newly added claims.

Claims 1-35 were previously pending in the subject Application. Claim 34 has been cancelled. Claims 36-45 are being added by way of this amendment. Thus, after entry of this Amendment, claims 1-33 and 35-45 will be pending. No new matter was added to the application when adding the new claims.

The following remarks address the rejections of claims 1-33 and 35 as set out in the present Office Action and patentability of newly added claims 36-45. Applicants respectfully request reconsideration.

Objection to the Abstract

Applicants have amended the Abstract of the present application in accordance with the Examiner's requirement to keep the Abstract between 50 and 150 words.

Rejection of Pending Claims 1-35 under 35 U.S.C. §102(e)

The Examiner has rejected submitted claim 1 under 35 U.S.C. §102(e) as being anticipated by Spector (U.S. Patent 6,377,988). The Office Action likens elements in Spector to those in claim 1 to reject the claimed invention.

In general, Spector discloses a network of switch devices in different geographical zones that receive translated commands from an overseeing network manager. The network manager translates generic commands into a form that can be handled by a respective switch type in a corresponding zone of switches to be controlled.

It is important to note that Spector discloses controlling “zones” of switch devices in different geographical areas. Each zone in Spector defines a geographical area having multiple switches to support telephone calls (Spector, column 5, lines 14-19; lines 29-32; lines 47-50). A network manager in Spector translates a generic instruction into one or more specific instructions understood by different types of switches in a network to support a telephone call.

In contradistinction to Spector, the method of the claimed invention includes converting a generic command into one or multiple different vendor specific zone control commands to control “zoning” within a device (e.g., a switch device), not to control multiple devices within a geographical area (i.e., zone) as in Spector. Thus, claim 1 includes a limitation not disclosed by Spector.

Applicants respectfully submit that verbiage of the claims should be given their broadest reasonable meaning in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definition or otherwise that may be afforded by the written description contained in the Applicant’s specification (MPEP 2111). Given this claim interpretation standard as a guideline, Applicants respectfully submit that the term “zoning” in claim 1 has a specific meaning to those of ordinary skill in the art. For example, one of ordinary skill in the art would understand that the term “zoning” is a noun referring to a “process of allocating resources in a SAN (Storage Area Network) to load balance the devices connected to the network.” This definition of “zoning” can be found at the website webopedia.com.

Zoning allows a network administrator to separate a SAN into units and allocate storage to those units based on need. Zoning may also be used to protect the SAN system from threats such as viruses, data corruption and

malicious hackers as peripheral devices associated with their respective zones are not able to communicate outside the zone through their ports unless given permission. As further discussed at page 3 lines 8-21, the present application identifies that “zoning” operates as a form of access control and provides an organized mechanism of managing and associating amounts of data storage to specific computer systems.

Accordingly, Applicants respectfully submit that Spector does not teach or suggest controlling “zoning within a device” nor “controlling zoning in a plurality of different vendor devices” as in the claimed invention. For example, there is no indication in Spector to control zoning within a specific vendor device because Spector is directed to a technology that does not support “zoning” internal to the device at all. Therefore, Spector does not appreciate the technical hurdles addressed by the present invention nor does it suggest a technique of overcoming them. As discussed, Spector discloses controlling switch devices with a geographical zone for the purposes of establishing telephone calls. There is no indication by Spector how a geographical zone of switches applies to “zoning” in a storage area network.

The claimed invention is advantageous because a single network manager can translate a generic zone control command into a plurality of different vendor specific commands to control “zoning” associated with a device or each of multiple different types of vendor specific devices. Providing capability for a localized zone control management translation function as in the claimed invention eliminates the need to convert generic commands at corresponding different vendor switch devices.

For the reasons stated above, Applicants submit that claim 1 is patentably distinct and advantageous over the cited prior art, and the rejection of claim 1 under 35 U.S.C. §102(b) should be withdrawn. Accordingly, allowance of claim 1

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is respectfully requested. If the rejection of claim 1 is to be maintained, Applicants respectfully request that it be pointed out with particularity where the cited prior art discloses a technique of translating the generic zone control command to control zoning within a device as recited in claim 1.

Because claims 2-11 and 28-32 depend from and further limit claim 1, Applicants submit that claims 2-11 and 28-32 are also in allowable condition.

Applicants respectfully submit that claim 12 includes similar patentable distinctions over the cited prior art as claim 1. Thus, Applicants respectfully request allowance of claim 12 and corresponding dependent claims 13-23.

Applicants respectfully submit that claims 24 and 27 include similar patentable distinctions as discussed over the cited prior art as claim 1. Thus, Applicants respectfully request allowance of claim 24 and corresponding dependent claims 25-26 as well as claim 27.

Applicants have amended claim 33 to include the limitations in previously pending claim 34. Thus, claim 33 now includes similar patentable distinctions over the cited prior art as claim 1 to the extent that claim 33 recites controlling zoning. Thus, Applicants respectfully request allowance of claim 33 and corresponding dependent claims 35.

Applicants would like to point out that rejected dependent claims further distinguish the invention as in claims 1 over the cited prior art. Specifically, dependent claim 11 recites an application “that controls zoning within switches in a data storage network.” Applicants respectfully submit that i) Spector does not disclose, as previously discussed, controlling “zoning” within a device and more specifically, ii) Spector does not disclose “zoning” within switches of a data storage network. Applicants request that the Examiner point out with particularity

where Spector discloses these claim limitations or withdrawal of the lack of novelty rejection.

Independent claim 27 is directed to “a management application that operates to control zoning in devices from different vendors in a data storage network.” For similar reasons as discussed above, Applicants request that the Examiner specifically point out where Spector teaches these claim limitations.

Regarding dependent claim 31 and 35, Spector provides no indication of “identifying that there is no need to map the generic zone control command to corresponding at least one vendor specific device commands” and “utilizing the generic zone control command to carry out zone control operations.” For example, at column 5 lines 23 to 28, Spector recites that “the generic instruction generated in the generator 14 is transmitted to the bank of translators 15a, 15b, 15c which each translate the instruction into a form which can be handled by a respective switching type A, B, C.” Contrary to the claimed invention, Spector discloses that each generic instruction in Spector is translated into a specific instruction understood by the switch, not that a generic instruction need not be mapped or translated.

Applicants request that the Examiner point out with particularity where Spector discloses these claim limitations or withdrawal of the lack of novelty rejection with respect to claims 31 and 35.

Regarding claim 32, there is no mention in Spector of translating instructions to control zoning associated with hosts and corresponding data storage systems in a storage network.

Patentability of New claims 36-45

Newly submitted claim 36 depends from claim 1 and includes the limitation of “wherein receiving the generic zone control command includes receiving a configuration command to configure a zone in the device to support access in a storage area network.” Support for this new claim can be found in text at page 21 lines 3 to 13, related figures, and elsewhere throughout the specification.

Spector discloses controlling switches in a defined geographical zone. In contradistinction, the claimed invention as recited in claim 36 involves configuring a zone within the device to support access. Thus, the invention as in claim 36 is distinguished over the cited prior art. Applicants respectfully request allowance of dependent claim 36 as well as dependent claim 41.

Newly submitted claim 37 depends from claim 1 and includes the limitation of “wherein controlling zoning within the device includes controlling which of multiple ports in the device shall be grouped together to form the zone in the device through which servers are able to access a data storage system in a storage area network.” Support for this new claim can be found in text at page 14 lines 20 to 22, related figures, and elsewhere throughout the specification.

Spector discloses controlling switches in a defined geographical zone to support telephone calls. In contradistinction, the claimed invention as recited in claim 37 involves controlling which of multiple ports in the device shall be grouped together to form a zone through which servers access a data storage system. There is no mention in Spector that ports of a switch are grouped together, nor is there mention of a grouping of ports in a single device that provide access to a data storage system. Thus, the invention as in claim 37 is distinguished over the cited prior art. Applicants respectfully request allowance of dependent claim 37 as well as dependent claim 42.

Newly submitted claim 38 depends from claim 37 and includes the limitation of “wherein controlling which of multiple ports in the device shall be grouped together to form the zone includes configuring multiple server ports and multiple data storage ports of the device to be in the zone of the device, the multiple server ports associated with the zone handling a transfer of data between a server and the device, the multiple data storage ports associated with the zone handling a transfer of data between the device and the data storage system.” Support for this new claim can be found in text at page 18 lines 8 to 15, related figures, and elsewhere throughout the specification.

As discussed, Spector discloses controlling switches in a defined geographical zone to support telephone calls. In contradistinction, the claimed invention as recited in claim 38 involves controlling which of multiple server ports and data storage ports in the device shall be grouped together to form a zone through which servers access a data storage system. There is no mention in Spector that ports of a switch are grouped together, nor is there mention of a grouping of server ports or data storage ports in a single device that provide access to a data storage system. Thus, the invention as in claim 38 is distinguished over the cited prior art. Applicants respectfully request allowance of dependent claim 38 as well as dependent claim 43.

Newly submitted claim 39 depends from claim 38 and includes the limitation of “wherein steps of receiving, translating, and performing are executed in a network manager device that configures the zone associated with the device, the zone enforcing which of multiple servers coupled to the device is capable of accessing selected portions of the data storage system.” Support for this new claim can be found in text at page 17 lines 21 to 28, related figures, and elsewhere throughout the specification. This technique is unique with respect to Spector who discloses controlling switches in a defined geographical zone to support telephone calls. For example, the claimed invention indicates that zones

in the device (e.g., a switch device) enable servers to access only portions of the shared storage rather than all parts of the shared storage. Thus, the servers have limited access to shared storage depending on which zone they are associated. Applicants respectfully request allowance of dependent claim 39 as well as dependent claim 44.

Newly submitted claim 40 depends from claim 1 and includes the limitation of "identifying to which type of vendor device in a storage area network the generic zone control command pertains; if the generic zone control command pertains to a first vendor type of device, forwarding the generic zone control command to the first vendor type of device; and if the generic zone control command pertains to a second vendor type of device, translating the generic zone control command to a vendor specific zone control command associated with the second vendor type of switch and forwarding the vendor specific zone control command to the second vendor type of device." This claim is consistent with previously added claim 31 and 35. Support for this new claim can be found in text at page 23 lines 13 to 28, related figures, and elsewhere throughout the specification.

Spector discloses translating a generic instruction via multiple translators to control switches in a defined geographical zone. There is no mention that the generic instruction itself can be selectively forwarded to the switch device for purposes of controlling the switch device. In contradistinction to Spector, the claimed invention as recited in claim 40 involves forwarding the generic zone control command to control the device if the device is of a first vendor type. Thus, the first vendor type of device does not require translation before forwarding. If the generic zone control command is of a second vendor type, then the generic command is translated into a vendor specific command that is forwarded to the device. Spector does not disclose this conditional translation and forwarding technique. Thus, the invention as in claim 40 is distinguished

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over the cited prior art. Applicants respectfully request allowance of dependent claim 40 as well as dependent claim 44.

CONCLUSION

In view of the foregoing remarks, Applicants submit that the pending claims as well as newly added claims are in condition for allowance. A Notice to this affect is respectfully requested. If the Examiner believes, after reviewing this Response, that the pending claims are not in condition for allowance, the Examiner is respectfully requested to call the Representative.

Applicants hereby petition for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-0901.

Respectfully submitted,



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